

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An interactive audio system comprising:

an audio source;

a playing terminal adapted to be coupled to the audio source by a data link; and

an audio transducer arrangement and a user control device adapted to be coupled to the playing terminal,

wherein the audio source is arranged to transmit a plurality of audio components to the playing terminal by the data link, each audio component comprising audio data relating to ~~an~~ a different audible sound source or a different audio track, the playing terminal being arranged to ~~output~~ output, via the audio transducer arrangement, the audible sound or track corresponding to each audio component, ~~by the audio transducer arrangement,~~ the user control device being arranged to enable user-selection of one of the audio components as a focus component based on the user selecting one of the audible sounds or tracks being emitted ~~from~~ by the audio transducer, the playing terminal being further arranged to control the data rate of transmitted data, relating to

each audio component, sent from the audio source to the playing terminal, the data rate of transmitted data being dependent on the selected focus sound or track.

2. (Currently amended) A system according to claim 1, wherein the playing terminal is further arranged for spatially processing the audio components so as to add positional data, indicating a position in space, relative to the audio transducer arrangement, at which each audio component is to be perceived.

3. (Currently amended) A system according to claim 2, wherein the transducer arrangement includes plural audio transducers, each of the audio transducers being at a different location relative to a user location so a user at the user location can perceive the direction of sound from each transducer and the positional data comprises information relating to ~~(a) the three-dimensional position in space at which the audible sound or track is to be perceived, (b) an audio transducer associated with the focus component, and (c) an audio transducer associated with a component that is not a focus component, the focus component data rate being greater than the data rate of a component that is not the focus component.~~

4. (Previously presented) A system according to claim 1, wherein the data rate of transmitted data is defined by a transmission bit-rate, the playing terminal being

arranged to set the bit-rate of the audio component, selected as the focus component, to a first predetermined bit-rate, and the bit-rate of another audio component to a second predetermined bit-rate.

5. (Previously presented) A system according to claim 4, wherein the first and second predetermined bit-rates are set such as to enable higher quality audio reproduction of the focus component compared with the audio reproduction of the another audio component, the higher quality audio reproduction of the focus component having a higher bit-rate than the bit-rate of the another component.

6. (Previously presented) A system according to claim 1, wherein the playing terminal is arranged to control the data rate of transmitted data sent from the audio source by (a) causing the audio source to stream the focus component at a predetermined bit-rate, and (b) causing the audio source to transmit, for each non-focus component, a non-continuous data burst of audio data relating to the sound or track, or a fraction of the sound or track.

7. (Original) A system according to claim 6, wherein the playing terminal is arranged to receive the burst of audio data, relating to each non-focus component, and to store the burst of data for subsequent replaying at the playing terminal.

8. (Previously presented) A system according to claim 3, wherein the user control device comprises a position sensor for being mounted on a body part of a user, the position sensor being arranged to cause selection of an audio component as the focus component by generating position data indicating the relative position of the user's body part, the playing device thereafter comparing the position data with the positional data added to each of the audio components so as to determine the audible sound or track to which the user's body part is directed.

9. (Original) A system according to claim 8, wherein the position sensor is a head-mountable sensor, the playing device being arranged to determine the audible sound or track to which a part of the user's head is directed.

10. (Original) A system according to claim 1, wherein the user control device comprises a selection switch or button.

11. (Original) A system according to claim 1, wherein the user control device comprises a voice recognition facility arranged to receive audible commands from a

user and to interpret the received commands so as to determine which audio component is selected as the focus component.

12. (Previously presented) A system according to claim 1, wherein the data link includes a wireless data link.

13. (Previously presented) A system according to claim 12, wherein the wireless data link includes a mobile telephone connection.

14. (Original) A system according to claim 1, wherein each audio component is representative of a link to a further sub-set of audio components stored at the audio source, the playing device being operable to request transmission of the sub-set of audio components in the event that a link represented by an audio component is operated.

15. (Currently amended) An interactive audio system comprising:

a playing terminal adapted to be coupled to one or more audio sources by a respective data link or respective data links; and

an audio transducer arrangement and a user control device adapted to be coupled to the playing terminal,

wherein the playing terminal is arranged to receive a plurality of audio components from the one or more audio sources by the data link or data links, each audio component comprising audio data relating to ~~an~~ a different audible sound source or a different track, the playing terminal being arranged to output the audible sound or track corresponding to each audio component, ~~by~~ to the audio transducer arrangement, the user control device being arranged to enable user-selection of one of the audio components as a focus component based on the user selecting one of the audible sounds or tracks being emitted from the audio transducer, the playing terminal being further arranged to control the data rate of transmitted data, relating to each audio component, sent from the or each audio source to the playing terminal, the data rate of transmitted data being dependent on the selected focus sound or track.

16. (Currently amended) A playing terminal for use in an interactive audio system, the playing terminal comprising:

a first port for receiving a plurality of audio components from a remote audio source, each audio component comprising audio data relating to ~~an~~ a different audible sound source or a different audio track which can be played through an audio transducer arrangement coupled to the playing terminal;

a second port for receiving selection commands from a user control device which is connectable to the playing terminal; and

a processing arrangement coupled to the first and second ports,

wherein the processing arrangement is arranged to (a) receive the audio components from the first port and to play the audible sound or track relating to each audio component by the audio transducer arrangement, (b) receive a selection command from the second port, the selection command being indicative of one of the audible sounds or tracks currently selected by a user as a focus sound or track, and (c) send a control signal to the audio source by the first port, the control signal indicating the data rate of data, relating to each audio component, to be transmitted from the audio source to the playing terminal, the data rate of data being dependent on the audio component selected as the focus component.

17. (Currently amended) A playing terminal according to claim 16, wherein the transducer arrangement includes plural audio transducers, each of the audio transducers being at a different location relative to a user location so a user at the user location can perceive the direction of sound from each transducer, the processor arrangement being arranged to spatially process the audio components so as to add positional data, indicating a position in space, relative to the audio transducer arrangement, at which each audio component is to be ~~perceived~~ perceived, ~~so that an audio transducer is associated with the focus component and an audio transducer is~~

~~associated with a component that is not the focus component,~~ the focus component having a data rate greater than the data rate of a component that is not the focused component.

18. (Currently amended) A method of operating an interactive audio system, the method comprising:

receiving, at a playing terminal, a plurality of audio components transmitted over a data link from a remote audio source, each audio component comprising audio data relating to ~~an~~ a different audible sound source or a different audio track;

playing each of the audio components so as to output their respective audible sound or track from an audio transducer arrangement coupled to the playing terminal;

selecting one of the audible sounds or tracks as a focus sound or track; and

in response to the selection step, transmitting a control signal from the playing terminal to the remote audio source so as to control the data rate of transmitted data, relating to each audio component, at which the audio components are transmitted from the audio source to the playing terminal, the data rate of the transmitted data being dependent on the selected focus sound or track.

19. (Currently amended) A method according to claim 18, wherein the audio transducer arrangement includes plural audio transducers, each of the audio transducers being at a different location relative to a user so the user can perceive the direction of sound from each transducer, and further comprising the step of spatially processing the received audio components so as to add positional data, indicating a position in space, relative to the audio transducer, at which each audio component is to be perceived ~~so that a transducer associated with the focus sound is responsive to transmitted data having a data rate higher than a transducer associated with a sound that is not the focus sound.~~

20. (Original) A method according to claim 19, wherein the positional data comprises information relating to the three-dimensional position in space, relative to the audio transducer, at which the audible sound or track is to be perceived.

21. (Previously presented) A method according to claim 18, wherein the data rate of transmitted data is defined by a transmission bit-rate, the playing terminal setting the bit-rate of the audio component, selected as the focus sound, to a higher bit-rate than that of the other audio components that are not associated with the focus sound.

22. (Original) A method according to claim 18, wherein the playing terminal controls the quantity of transmitted data sent from the audio source by means of (a) causing the audio source to stream the focus component at a predetermined bit-rate, and (b) causing the audio source to transmit, for each non-focus component, a non-continuous burst of audio data relating to the sound or track, or a fraction of the sound or track.

23. (Original) A method according to claim 22, wherein the playing terminal receives the burst of audio data, relating to each non-focus component, and stores the burst of data for subsequent replaying at the playing terminal.

24. (Previously presented) A method according to claim 18, wherein the step of selecting one of the audible sounds or tracks as a focus sound or track comprises operating a control device in the form of a position sensor mounted on a body part of a user, the position sensor causing selection of an audio sound or track as the focus sound or track by generating position data indicating the relative position of the user's body part, the playing device thereafter comparing the position data with the positional data for each of the audio components so as to determine the audible sound or track to which the user's body part is directed.

25. (Original) A method according to claim 24, wherein the position sensor is a head-mountable sensor, the playing device determining the audible sound or track to which a part of the user's head is directed.

26. (Original) A method according to claim 18, wherein the step of selecting one of the audible sounds or tracks as a focus sound or track comprises operating a control device in the form of a selection switch or button.

27. (Original) A method according to claim 18, wherein the step of selecting one of the audible sounds or tracks as a focus sound or track comprises operating a control device in the form of a voice recognition facility which receives audible commands from a user and interprets the received commands so as to determine which audible sound or track is selected as the focus sound or track.

28.-29. (Canceled)

30. (Original) A method according to claim 18, wherein each of the audible sounds or tracks represents a link to a further sub-set of sounds or tracks, the method further comprising the step of operating one of the links so that audio components relating to

the further sub-set of sounds or tracks are transmitted from the audio source to the playing terminal over the data link.

31. (Original) A method according to claim 18, wherein each of the audible sounds or tracks represents a link to a web-site of a service provider.

32. (Currently amended) A computer program stored on a computer-usable medium, the computer program comprising computer-readable instructions for causing a processing device to perform the steps of:

receiving a plurality of audio components transmitted over a data link from a remote audio source, each audio component comprising audio data relating to ~~an~~ a different audible sound source or different audio track;

playing each of the audio components so as to output their respective audible sound or track from an audio transducer arrangement coupled to the processing device;

setting one of the audible sounds or tracks as a focus sound or track; and

in response to the setting step, transmitting a control signal to the remote audio source so as to control the data rate of transmitted data, relating to each audio component, at which the audio components are transmitted from the audio source, the data rate of transmitted data being dependent on the focus sound or track.

33. (Currently amended) An interactive audio system comprising:

an audio source ~~means~~arrangement;

an audio playing ~~means~~arrangement adapted to be connected to the audio source ~~means~~arrangement by a communication ~~means~~link; and

an audio production ~~means~~arrangement and a user control ~~means~~arrangement adapted to be connected to the audio playing means,

wherein the audio source ~~means~~arrangement is arranged to transmit a plurality of audio components to the audio playing ~~means~~arrangement by the communication ~~means~~link, each audio component comprising audio data relating to ~~an~~a different audible sound source or different audio track, the audio playing ~~means~~arrangement being arranged to output, to the audio production arrangement, the audible sound or track corresponding to each audio component, ~~by the audio production means~~, the user control ~~means~~arrangement being arranged to enable user-selection of one of the audio components as a focus component based on the user selecting one of the audible sounds or tracks being emitted from the audio production ~~means~~arrangement, the audio playing ~~means~~arrangement being further arranged to control the data rate of transmitted data, relating to each audio component, sent from the audio source ~~means~~arrangement to the audio playing ~~means~~arrangement, the data rate of transmitted data being dependent on the selected focus sound or track.

34. (Previously presented) The system of claim 1, wherein the user control device is arranged to enable selection of plural audio components as focus components having relatively high data rates and at least one other audio component as a non-focus component having a relatively low data rate.

35. (Previously presented) The system of claim 15, wherein the playing terminal is arranged to enable selection of a plurality of sounds or tracks as focus sounds or tracks having relatively high data rates, and at least one remaining sound or track as a non-focus sound or track having a relatively low data rate.

36. (Previously presented) The method of claim 18, wherein a plurality of sounds or tracks are selected as focus sounds or tracks having relatively high data rates, and at least one remaining sound or track is selected as a non-focus sound or track having a relatively low data rate.